## 10/573378

## SEQUENCE LISTING

## AP20R25UTULLTO EA MAR 2006

<110> Kenya Shitara Kazuyasu Nakamura Yuji Ohki	
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Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80
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40 45
Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro
50 55 60
Pro Lys Leu Leu Ile Tyr Gly Thr Ser Lys Leu Ala Ser Gly Val Pro
65 70 75 80
Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
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Val Ile Val Ser Ser Gly Asp Ile Val Met Thr Gln Ser Pro Asp Ser
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                                       25
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Pro Lys Pro Trp Ile Tyr Gly Thr Ser Lys Leu Ala Ser Gly Val Pro
65 70 75 80
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                                                                                336
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                                       105
                                                                                384
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<212> DNA
<213> Artificial Sequence
<220>
<221> CDS
<222> (1)..(384)
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                                                                                48
Met Asp Phe Gln Val Gln Ser Phe Ser Leu Leu Leu Ile Ser Ile Thr
                                                                                96
gtc ata gtg tcc agt gga gac atc gtg atg acc cag tct cca gac tcc
Val Ile Val Ser Ser Gly Asp Ile Val Met Thr Gln Ser Pro Asp Ser
                                       25
                                                                                144
ctg gct gtg tct cta ggc gag agg gcc acc atc acc tgc cgt gcc agc
Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Thr Cys Arg Ala Ser
```

tca agt gta agc tac atg cac tgg ttc cag cag aaa cca gga cag tcc Ser Ser Val Ser Tyr Met His Trp Phe Gln Gln Lys Pro Gly Gln Ser 50 55 60	192
cct aag ccc tgg att tac ggc aca tcc aag ctg gct tct ggg gtc cct Pro Lys Pro Trp Ile Tyr Gly Thr Ser Lys Leu Ala Ser Gly Val Pro 65 70 75 80	)
gac aga ttc agt ggc agc ggg tct ggg aca tct tat tct ctc acc atc Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile 85 90 95	
agc agc ctg cag gct gaa gat gct gca act tat tac tgt ctg cag agg Ser Ser Leu Gln Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Leu Gln Arg 100 105 110	336 I
agt agt tac cca cca acg ttc ggc caa ggg acc aag gtg gaa atc aag Ser Ser Tyr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys 115 120 125	384
<210> 24 <211> 384 <212> DNA <213> Artificial Sequence	
<220> <221> CDS <222> (1)(384) <223> Description of Artificial Sequence: synthetic DNA	
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gtc ata gtg tcc agt gga gac atc gtg atg acc cag tct cca gac tcc Val Ile Val Ser Ser Gly Asp Ile Val Met Thr Gln Ser Pro Asp Ser 20 25 30	96
ctg gct gtg tct cta ggc gag agg gcc acc atc aac tgc cgt gcc agg Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser 35 40 45	144
tca agt gta agc tac atg cac tgg tac cag cag aaa cca gga cag tcc Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ser 50 55 60	192
cct aag ccc ctc att tac ggc aca tcc aag ctg gct tct ggg gtc cct Pro Lys Pro Leu Ile Tyr Gly Thr Ser Lys Leu Ala Ser Gly Val Pro 65 70 75 80	)
gac aga ttc agt ggc agc ggg tct ggg aca tct tat tct ctc acc atc Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile 85 90 95	288
agc agc ctg cag gct gaa gat gtg gca gtt tat tac tgt ctg cag agg Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Leu Gln Arg 100 105 110	336 J
agt agt tac cca cca acg ttc ggc caa ggg acc aag gtg gaa atc aa	a 384

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<220>
<221> CDS
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                                                                                       48
Met Asp Phe Gln Val Gln Ser Phe Ser Leu Leū Leu Ile Sēr Ile Thr
gtc ata gtg tcc agt gga gac atc gtg atg acc cag tct cca gac tcc
Val Ile Val Ser Ser Gly Asp Ile Val Met Thr Gln Ser Pro Asp Ser
                                                                                       96
ctg gct gtg tct cta ggc gag agg gcc acc atc aac tgc cgt gcc agc
Leu Ala Val Ser Leu Gly Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser
                                                                                       144
                                      4Õ
tca agt gta agc tac atg cac tgg tac cag cag aaa cca gga cag tcc
Ser Ser Val Ser Tyr Met His Trp Tyr Gln Gln Lys Pro Gly Gln Ser
                                                                                       192
cct aag ccc tgg att tac ggc aca tcc aag ctg gct tct ggg gtc cct
Pro Lys Pro Trp Ile Tyr Gly Thr Ser Lys Leu Ala Ser Gly Val Pro
65 70 75 80
                                                                                       240
gac aga ttc agt ggc agc ggg tct ggg aca tct tat tct ctc acc atc Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile
                                                                                       288
agc agc ctg cag gct gaa gat gtg gca gtt tat tac tgt ctg cag agg
                                                                                       336
Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Leu Gln Arg
                100
                                          105
agt agt tac cca cca acg ttc ggc caa ggg acc aag gtg gaa atc aaa
                                                                                       384
Sēr Sēr Tyr Pro Pro Thr Phe Ğİy Gln Ğİÿ Thr Lys Val Ğlu Ile Lys
<210> 26
<211> 118
<212> PRT
<213> Artificial Sequence
<220>
<221> gene
<222> (1)..(118)
<223> Description of Artificial Sequence: synthetic protein
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30
Tyr Met Thr Trp Val Arg Gln Ala Pro Thr Lys Gly Leu Glu Trp Val
                                      40
                                                   Page 14
```

```
Ala Tyr Ile Ser Ser Gly Gly Gly Ser Thr Tyr Tyr Arg Asp Ser Val
50 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Thr Thr Glu Asp Tyr Gly Tyr Trp Phe Ala Tyr Trp Gly Gln Gly Thr
100 105 110
Leu Val Thr Val Ser Ser
         115
<210> 27
<211> 106
<212> PRT
<213> Artificial Sequence
<220>
<221> gene
<222> (1)..(106)
<223> Description of Artificial Sequence: synthetic protein
<400> 27
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly 1 15
Glu Arg Ala Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Ser Tyr Met
20 25 30
His Trp Phe Gln Gln Lys Pro Gly Gln Ser Pro Lys Pro Trp Ile Tyr 35 40 45
Gly Thr Ser Lys Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser 50 55 60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Leu Gln Ala Glu 65 70 75 80
Asp Ala Ala Thr Tyr Tyr Cys Leu Gln Arg Ser Ser Tyr Pro Pro Thr 85 90 95
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105
<210> 28
<211> 106
<212> PRT
<213> Artificial Sequence
<220>
<221> gene
<222> (1)..(106)
<223> Description of Artificial Sequence: synthetic protein
<400> 28
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly 1 15
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Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Ser Ser Val Ser Tyr Met 20 25 30
His Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Pro Leu Ile Tyr 35 40 45
Gly Thr Ser Lys Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser 50 55 60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Leu Gln Ala Glu 65 70 75 80
Asp Val Ala Val Tyr Tyr Cys Leu Gln Arg Ser Ser Tyr Pro Pro Thr
85 90 95
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105
<210> 29
<211> 106
<212> PRT
<213> Artificial Sequence
<220>
<221> gene
<222> (1)..(106)
<223> Description of Artificial Sequence: synthetic DNA
<400> 29
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly
1 10 15
Glu Arg Ala Thr Ile Asn Cys Arg Ala Ser Ser Ser Val Ser Tyr Met.
20 25 30
His Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Pro Trp Ile Tyr 35 40 45
Gly Thr Ser Lys Leu Ala Ser Gly Val Pro Asp Arg Phe Ser Gly Ser 50 60
Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Ser Leu Gln Ala Glu
65 70 75 80
Asp Val Ala Val Tyr Tyr Cys Leu Gln Arg Ser Ser Tyr Pro Pro Thr
85 90 95
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105
<210> 30
<211> 150
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: synthetic DNA
<400> 30
aattaaccct cactaaaggg gaattcgcgg ccgctctccc attcagtaat cagtcctgca 60
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gcactgcaca gactcctcac catggacatc aggctcagct tggttttcct tgtccttttc 120

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<210> 31
<211> 148
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: synthetic DNA
<400> 31
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atccagaggc tgcacaggag agtctcaggg acctcccagg ctgtacgacg cctccccag 120
actccaccag ctgcacctga cactggac
                                                                   148
<210> 32
<211> 150
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic DNA
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tcgagactcc gtgaagggcc ggttcaccat ctccagagac aattccaaga acacgctgta 120
tctgcaaatg aacagcctga gagccgagga
                                                                   150
<210> 33
<211> 130
<212> DNA
<213> Artificial Sequence
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gaccgatggg cccttggtgg aggctgagga gacggtgacc agggttccct ggccccagta 60
agcaaaccaa tacccatagt cctctctcgc acagtaatat acggccgtgt cctcggctct 120
caggctgttc
                                                                   130
<210> 34
<211> 150
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: synthetic DNA
<400> 34
aattaaccct cactaaaggg gaattctcca aacttcaagt acacaatgga ttttcaggtg 60
cagagtttca gcctcctgct aatcagtatc acagtcatag tgtccagtgg agacatcgtg 120
                                       Page 17
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ataaaaggtg tccagtgtga gg	142
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<220> <223> Description of Artificial Sequence: synthetic DNA	
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<210> 40 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: synthetic DNA	
<400> 40 ggctccaacg aaggggctgg	20
<210> 41 <211> 92 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: synthetic DNA	
<400> 41 gtacaacaga ggactatggg tattggtttg cttactgggg ccagggaacc ctggtcaccg	60
tctcctcagc ctccaccaag ggcccatcgg tc	92
<210> 42 <211> 50 <212> DNA <213> Artificial Sequence	
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<210> 43 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: synthetic DNA	
<400> 43 accatcacct gccgtgccag	20

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<210> 44
<211> 20
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic DNA
                                                                    20
gcacatccaa gctggcttct
<210> 45
<211> 20
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic DNA
<400> 45
agaagccagc ttggatgtgc
                                                                    20
<210> 46
<211> 142
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: synthetic DNA
<400> 46
aattaaccct cactaaaggg gaattctcca aacttcaagt acacaatgga ttttcaggtg 60
cagagtttca gcctcctgct aatcagtatc acagtcatag tgtccagtgg agacatcgtg 120
ctcacccagt ctccaacaac ca
                                                                    142
<210> 47
<211> 130
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic DNA
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agctggcacg gcaggtgatg gtggccctct cgcctggaga cacagccatg gttgttggag 120
                                                                    130
actgggtgag
<210> 48
<211> 133
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: synthetic DNA
                                       Page 20
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<400> 48	
gacagtcccc taagccctgg atttacggca catccaagct ggcttctggg gtccctgaca	60
gattcagtgg cagcgggtct gggacatctt attctctcac catcagcagc ctgcaggctg	120
aagatgctgc aac	133
<210> 49 <211> 123 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: synthetic DNA	
<400> 49 gtaatacgac tcactatagg gcctcgagcg tacgtttgat ttccaccttg gtcccttggc	60
cgaacgttgg tgggtaacta ctcctctgca gacagtaata agttgcagca tcttcagcct	120
gca	123
<210> 50 <211> 30 <212> DNA <213> Artificial Sequence	
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<400> 50 aaggggaatt ctccaaactt caagtacaca	30
<210> 51 <211> 50 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: synthetic DNA	
<400> 51 agaagccagc ttggatgtgc cgtaaatgag gggcttaggg gactgtcctg	50
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<210> 53 <211> 69 <212> DNA	

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<220>
<223> Description of Artificial Sequence: synthetic DNA
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                                                                          69
gaaccagtg
<210> 54
<211> 118
<212> PRT
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<220>
<221> gene
<222> (1)..(108)
<223> Description of Artificial Sequence: synthetic protein
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1 10 15
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Asn Tyr
20 25 30
Tyr Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val 35 40 45
Ser Tyr Ile Ser Ser Gly Gly Gly Ser Thr Tyr Tyr Arg Asp Ser Val
50 55 60
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr 65 70 75 80
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys
85 90 95
Ala Arg Glu Asp Tyr Gly Tyr Trp Phe Ala Tyr Trp Gly Gln Gly Thr 100 \hspace{1cm} 105 \hspace{1cm} 110
Leu Val Thr Val Ser Ser
         115
<210> 55
<211> 106
<212> PRT
<213> Artificial Sequence
<220>
<221> gene
<222> (1)..(106)
<223> Description of Artificial Sequence: synthetic protein
<400> 55
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Val Ser Tyr Met 20 25 30
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His Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile Tyr 35 40 45
Gly Thr Ser Lys Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser 50 55 60
Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu 65 70 75 80
Asp Phe Ala Thr Tyr Tyr Cys Leu Gln Arg Ser Ser Tyr Pro Pro Thr 85 90 95
Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
100 105
<210> 56
<211> 18
<212> PRT
<213> Homo sapiens
<400> 56
Gly Pro Glu Thr Leu Ser Gly Ala Glu Leu Val Asp Ala Leu Gln Phe
1 5 10 15
val Cys
<210> 57
<211> 18
<212> PRT
<213> Homo sapiens
<400> 57
Cys Leu Gln Phe Val Ala Gly Asp Arg Gly Phe Tyr Phe Asn Lys Pro
Thr Gly
<210> 58
<211> 13
<212> PRT
<213> Homo sapiens
Cys Tyr Phe Asn Lys Pro Thr Gly Tyr Gly Ser Ser Ser 1
<210> 59
<211> 14
<212> PRT
<213> Homo sapiens
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Cys Thr Gly Tyr Gly Ser Ser Ser Arg Arg Ala Pro Gln Thr
1 10
<210> 60
<211> 12
<212> PRT
<213> Homo sapiens
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1 10
<210> 61
<211> 17
<212> PRT
<213> Homo sapiens
<400> 61
Cys Thr Gly Ile Val Asp Glu Ala Ala Phe Arg Ser Ala Asp Leu Arg
1 10 15
Arg
<210> 62
<211> 19
<212> PRT
<213> Homo sapiens
<400> 62
Cys Asp Leu Arg Arg Leu Glu Met Tyr Ala Ala Pro Leu Lys Pro Ala
1 1 15
Lys Ser Ala
<210> 63
<211> 9
<212> PRT
<213> Homo sapiens
<400> 63
<210> 64
<211> 10
<212> PRT
<213> Homo sapiens
<400> 64
Cys Ala Pro Leu Lys Pro Ala Lys Ser Ala
1 5 10
<210> 65
<211> 17
<212> PRT
<213> Homo sapiens
Cys Thr Gly Ile Val Asp Glu Cys Cys Phe Arg Ser Cys Asp Leu Arg 1 	 10 	 15
Arg
<210> 66
<211> 35
<212> DNA
<213> Artificial Sequence
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<223> Description of Artificial Sequence: synthetic DNA
<400> 66
gatgaattca gaagcaatgg gaaaaatcag cagtc
                                                                    35
<210> 67
<211> 32
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: synthetic DNA
<400> 67
                                                                    32
cattgtcgac gcatgtcact cttcactcct ca
<210> 68
<211> 24
<212> DNA
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: synthetic DNA
<400> 68
taaagaattc gcggccgctc tccc
                                                                    24
<210> 69
<211> 49
<212> DNA
<213> Artificial Sequence
<223> Description of Artificial Sequence: synthetic DNA
<400> 69
taaagtcgac gggcccttgg tggaggctga agagacagtg accagagtg
                                                                    49
<210> 70
<211> 33
<212> DNA
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<223> Description of Artificial Sequence: synthetic DNA
<400> 70
                                                                    33
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<210> 71
<211> 35
<212> DNA
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<223> Description of Artificial Sequence: synthetic DNA
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